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Focused Deterrence and the Prevention of Violent Gun Injuries: Practice, Theoretical Principles, and Scientific Evidence

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Abstract

Focused deterrence strategies are a relatively new addition to a growing portfolio of evidence-based violent gun injury prevention practices available to policy makers and practitioners. These strategies seek to change offender behavior by understanding the underlying violence-producing dynamics and conditions that sustain recurring violent gun injury problems and by implementing a blended strategy of law enforcement, community mobilization, and social service actions. Consistent with documented public health practice, the focused deterrence approach identifies underlying risk factors and causes of recurring violent gun injury problems, develops tailored responses to these underlying conditions, and measures the impact of implemented interventions. This article reviews the practice, theoretical principles, and evaluation evidence on focused deterrence strategies. Although more rigorous randomized studies are needed, the available empirical evidence suggests that these strategies generate noteworthy gun violence reduction impacts and should be part of a broader portfolio of violence prevention strategies available to policy makers and practitioners.

INTRODUCTION

Public health researchers and practitioners have historically prevented many deaths and illnesses by applying public health's fundamental problem-solving capacity to develop actions such as water quality control, immunization programs, and food inspection regimes (28). These successes exemplify the possibilities of addressing very serious problems through an organized effort rooted in scientific knowledge. Public health research and practice do not separate scientific discussions on the nature of problems from discussions of solutions to those problems. As described by Mercy & Hammond (45), a public health approach to violence prevention is action oriented, and its main goal is to analyze scientific evidence to improve injury prevention and violence reduction.

The public health approach starts by defining the problem and progresses toward identifying risk factors and causes, developing and implementing interventions, and measuring the effectiveness of these interventions. Public health researchers are careful to note that these steps sometimes do not follow this linear progression; instead, some steps may occur simultaneously or problems may need to be reanalyzed and ineffective interventions readjusted (45). They also note that information systems used to define and analyze youth violence problems can be useful in evaluating the impacts of prevention programs. Many criminologists recognize this public health model as a specific application of the basic action research model that has grounded applied social science inquiries for many decades (41). The fields of criminology and public health now often overlap and intersect in their examination of the nature of serious youth violence and the development of prevention responses to address it (69).

Tertiary prevention involves attempts to minimize the course of a problem once it is already clearly evident and causing harm. In public health terms, tertiary prevention efforts intervene after an illness has been contracted or an injury inflicted, and they seek to minimize the long-term consequences of the disease or injury (28). Criminologists and public health researchers have both contributed to a growing body of evaluation evidence that shows a wide range of effective tertiary treatments (42). This development has been important and has helped to strengthen the movement toward evidence-based violence prevention programs (24). Alongside it have developed some strategic innovations launched by criminal justice agencies, which have further established the emerging links between public health and criminology in youth violence prevention (69).

Focused deterrence strategies are a recent addition to an emerging collection of evidence-based violent gun injury prevention practices available to policy makers and practitioners (14). Briefly, focused deterrence strategies seek to change offender behavior by understanding underlying violence-producing dynamics and conditions that sustain recurring violent gun injury problems and by implementing a blended strategy of law enforcement, community mobilization, and social service actions (31, 34). In this article, we review the practice, theoretical principles, and available scientific evaluation evidence on these promising gun violence reduction strategies.

PRACTICE

Focused deterrence strategies attempt to influence the criminal behavior of individuals through the strategic application of enforcement and social service resources to facilitate desirable behaviors. These strategies are often framed as problem-oriented exercises with which specific recurring crime problems are analyzed and responses are highly customized to local conditions and operational capacities. As described by Kennedy (33), focused deterrence operations have tended to follow this basic framework (pp. 156–57):

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- Select a particular crime problem, such as gun violence.
- Form an interagency enforcement group, typically including police, probation and parole agencies, state and federal prosecutors, and sometimes federal enforcement agencies.
- Conduct research, usually relying heavily on the field experience of frontline police officers, to identify key offenders—and frequently groups of offenders, such as street gangs and drug crews—and the contexts of their behavior.
- Frame a special enforcement operation that is directed at these offenders and groups of offenders and is designed to substantially influence that context, for example by using any and all legal tools (or levers) to sanction groups, such as crack crews, whose members commit serious violence.
- Match these enforcement operations with parallel efforts to direct services and the moral voices of affected communities to the same offenders and groups.
- Communicate directly and repeatedly with offenders and groups to let them know (a) that they are under particular scrutiny, (b) which acts (such as shootings) will receive special attention, (c) when such attention has, in fact, been given to particular offenders and groups, and (d) what they can do to avoid enforcement action. One form of this communication is the “forum,” “notification,” or “call-in,” by which offenders are invited or directed (usually because they are on probation or parole) to attend face-to-face meetings with law enforcement officials, service providers, and community figures.

The Operation Ceasefire strategy, implemented by the Boston Police Department (BPD) during the mid-1990s as a problem-oriented policing project, was the seminal focused deterrence intervention. Like many large cities in the United States, Boston experienced a large sudden increase in youth gun violence between the late 1980s and early 1990s (39). In partnership with Harvard University researchers, the Ceasefire working group of criminal justice, social service, and community-based agencies diagnosed the youth gun violence problem in Boston as one of patterned, largely vendetta-like conflicts among a small population of chronic offenders and particularly among those involved in some 61 loose, informal, mostly neighborhood-based groups. These 61 gangs consisted of between 1,100 and 1,300 members, representing less than 1% of the city’s youth between the ages of 14 and 24 (36). Although small in number, these gangs were responsible for more than 60% of youth homicide in Boston (36).

The Operation Ceasefire focused deterrence strategy was designed to prevent gun violence by reaching out directly to gangs, saying explicitly that violence would no longer be tolerated, and backing up that message by pulling every lever legally available when violence occurred (31, 39). The chronic involvement of gang members in a wide variety of offenses made them, and the gangs they formed, vulnerable to a coordinated and comprehensive criminal justice response. Law enforcement agencies could disrupt street drug activity, focus police attention on low-level street crimes such as trespassing and public drinking, serve outstanding warrants, cultivate confidential informants for medium- and long-term investigations of gang activities, deliver strict probation and parole enforcement, seize drug proceeds and other assets, ensure stiffer plea bargains and sterner prosecutorial attention, request stronger bail terms (and enforce them), and bring potentially severe federal investigative and prosecutorial attention to gang-related drug and gun activity.

Simultaneously, gang outreach workers, probation and parole officers, and later, churches and other community groups offered gang members services and other kinds of help (31, 39). These partners also delivered an explicit message that violence was unacceptable to the community and that “street” justifications for violence were mistaken. The Ceasefire working group delivered this message in formal meetings with gang members (known as forums or call-ins), through individual police and probation contacts with gang members, through meetings with inmates at secure juvenile facilities in the city, and through gang outreach workers. The deterrence message



was not a deal with gang members to stop violence. Rather, it was a promise to gang members that violent behavior would evoke an immediate and intense response. If gangs committed other crimes but refrained from violence, the normal workings of police, prosecutors, and the rest of the criminal justice system dealt with these matters. But if gang members hurt people, the working group concentrated its enforcement actions on their gangs.

The Ceasefire working group recognized that, in order for the strategy to be successful, it was crucial to deliver a credible deterrence message to Boston gangs. Therefore, the Ceasefire law enforcement intervention directly targeted those gangs that were engaged in violent behavior rather than expending resources on those who were not. A key element of the strategy, however, was the delivery of a direct and explicit “retail deterrence” message to a relatively small target audience communicating which kind of behavior would provoke a special response and what that response would be (31, 34). Beyond the particular gangs subjected to the intervention, the deterrence message was applied to a relatively small audience (all gang-involved youth in Boston) rather than to a general audience (all youth in Boston), and it operated by making explicit cause-and-effect connections between the behavior of the target population and the behavior of the authorities. Knowledge of what happened to others in the target population was intended to prevent further acts of violence by gangs in Boston (33).

There have been subsequent replications of the Boston “pulling levers” focused deterrence strategy, such as US Department of Justice–sponsored research and development exercises in Los Angeles, California (60), and Indianapolis, Indiana (44), which centered on preventing serious violence by gangs and criminally active groups. Consistent with the problem-oriented policing approach, the approaches taken by agencies in Los Angeles and Indianapolis were tailored to fit their cities’ violence problems and operating environments. Operation Ceasefire in the Hollenbeck area of Los Angeles was framed to “increase the cost of violent behavior to gang members while increasing the benefits of nonviolent behavior” (60, p. 10). In the wake of the federal prosecution of a very violent street gang, the Indianapolis Violence Reduction Partnership used face-to-face “lever-pulling” meetings with groups of high-risk probationers and parolees to communicate a deterrence message that gun violence would provoke an immediate and intense law enforcement response. At the meetings, targeted groups of probationers and parolees were also urged to take advantage of a range of social services and opportunities, including employment, mentoring, housing, substance abuse treatment, and vocational training (44, p. 319).

A variation of the Boston model was applied in Chicago, Illinois, as part of the US Department of Justice–sponsored Project Safe Neighborhoods initiative (PSN). Gun- and gang-involved parolees returning to selected highly dangerous Chicago neighborhoods went through “offender notification forums,” where they were informed of their vulnerability as felons to federal firearms laws with stiff mandatory minimum sentences, were offered social services, and were addressed by community members and ex-offenders (53). The forums were designed “to stress to offenders the *consequences* should they choose to pick up a gun and the *choices* they have to make to ensure that they do not reoffend” (53, p. 231, emphasis in original). In addition to encouraging individual deterrence, the Chicago forums were designed explicitly to promote positive normative changes in offender behavior through an engaging communications process that offenders would be likely to perceive as procedurally just rather than simply threatening.

Links to Public Health Perspectives on Violence Prevention

Focused deterrence strategies fit well with public health perspectives on violence prevention. In general, a public health approach involves three elements: (a) a focus on prevention, (b) a focus on scientific methodology to identify risks and patterns, and (c) multidisciplinary collaboration

to address the issue(s) (27). Ecological frameworks to analyze gun violence problems, a tool used in both criminology and public health, guide the analysis of potential interventions to design an appropriate strategy to prevent or reduce firearm violence. Multidisciplinary collaborations are necessary to address complex individual, situational, and neighborhood risk factors that lead to persistent urban gun violence problems (29). Complementary to these public health perspectives, academic researcher–practitioner research partnerships and interagency working groups are two core components of focused deterrence strategies that deserve further consideration here.

Academic researcher–practitioner research partnerships. The activities of the research partners in focused deterrence initiatives depart from traditional research and evaluation roles usually played by academics. The integrated researcher/practitioner partnerships in the working group setting more closely resembled policy analysis exercises that blend research, policy design, action, and evaluation (23, 38). Researchers have been important assets in all the projects described above, providing what is essentially real-time social science aimed at refining the working group’s understanding of the problem, creating information products for both strategic and tactical use, testing—often in a very elementary but important fashion—candidate intervention ideas, and maintaining a focus on clear outcomes and performance evaluation. In addition, researchers played important roles in organizing the projects (8).

Academic research partners in focused deterrence strategies conduct epidemiological inquiries into the nature of local gun violence problems so interventions can be appropriately customized to the underlying conditions and situations that cause violent gun injuries to recur. Indeed, public health perspectives point to the importance of identifying and understanding problems as they aggregate across individuals or groups (49). Doing so frequently involves analyses of the geographic and network-based concentration of gun violence that are not unlike many public health analyses of the localized transmission of disease. For example, Braga and colleagues’ (10) analysis of the persistent geographic concentration of gun violence in small “hot spot” areas has some parallels with Kerani and colleagues’ (40) study of the spatial concentration of four different sexually transmitted diseases. Sophisticated network analyses of street gangs and high-rate youth offenders suggest that most of the risk of gun violence concentrates in small networks of identifiable individuals and that the risk of homicide and nonfatal gunshot injury is associated not only with individual-level risk factors, but also with the contours of one’s social network (51, 52). The identification and analysis of gun violence problems with respect to area concentration and underlying networks closely correspond with the idea of the “social epidemiology” of HIV/AIDS, as described by Poundstone and colleagues (56).

The underlying etiology of hot spots and their analogs (e.g., repeat offenders, victims) generally points toward the need for a concerted, targeted prevention strategy (13, 14, 65). The action-oriented approach found in many focused deterrence programs is similar to the public health posture toward understanding and intervening in youth violence problems (46). The initial stage of the process entails identifying and tracking the problem (e.g., elevated level of violent crime in a neighborhood) using some kind of surveillance system. This step is followed by an effort to understand the risk factors that contribute to the problem (e.g., actions between rival gangs) and develop an approach to ameliorate the problem and evaluate it. Finally, the gun violence prevention strategy may be introduced to other areas that face similar problems.

Convening an interagency working group with a locus of responsibility for action. Missing from the account of focused deterrence strategies reported in most law enforcement circles is the larger story of an evolving collaboration that spans the boundaries that divide criminal justice agencies from one another, criminal justice agencies from human service agencies, and criminal



justice agencies from the community. As suggested by the Institute of Medicine and the National Research Council, such collaborations are necessary to legitimize, fund, equip, and operate complex strategies that are most likely to succeed in both controlling and preventing youth gun violence (29). In essence, the cities that implement focused deterrence strategies leveraged resources by creating a very powerful “network of capacity” to prevent youth gun violence (48). These networks are well positioned to launch an effective response to recurring gun violence problems because criminal justice agencies, community groups, and social service agencies have coordinated and combined their efforts in ways that could magnify their separate effects. Successfully implemented focused deterrence strategies capitalize on these existing relationships by focusing these networks on the problem of gang-related gun violence.

Criminal justice agencies, unfortunately, work largely independent of each other, often at cross-purposes, often without coordination, and often in an atmosphere of distrust and dislike (8, 32). This dynamic is often true of different elements operating within agencies. The capacity to deliver a meaningful violence prevention intervention within cities was created by convening an interagency working group of frontline personnel with decision-making power who could assemble a wide range of incentives and disincentives. It was also important to place on the group a locus of responsibility for reducing gun violence. Prior to the creation of the interagency working groups, no single organization in these cities was responsible for developing and implementing an overall strategy for reducing gun violence.

Criminal justice agency partnerships provided a varied menu of enforcement options that could be tailored to particular gangs. Without these strategic partnerships, the available levers that could be pulled by the working group would have been limited. Social service and opportunity provision agencies were integrated into focused deterrence interventions to provide a much-needed “carrot” to balance the law enforcement “stick.” The inclusion of prevention and intervention programs, such as gang outreach workers (also known as streetworkers), in focused deterrence interventions was vitally important in securing community support and involvement in the program. Braga & Winship (15) suggest that the legitimacy conferred upon the Boston Ceasefire initiative by key community members such as black clergy members was an equally important condition that facilitated the successful implementation of this innovative program. Public health research also suggests that streetworkers may help to reduce violent gun injuries by mediating ongoing conflicts among gangs (63).

THEORETICAL PRINCIPLES

Deterrence theory suggests that crime can be prevented when the offender perceives that the costs of committing the crime outweigh the benefits (22, 71). Most discussions of the deterrence mechanism distinguish between “general” and “special” deterrence (19). General deterrence is the idea that the general population is dissuaded from committing crimes when it sees that punishment necessarily follows the commission of a crime. Special deterrence involves punishment administered to criminals with the intent to discourage them from committing crimes in the future. Much of the literature evaluating deterrence focuses on the effects of changing the certainty, swiftness, and severity of punishment associated with certain acts on the prevalence of those crimes (1, 50, 54).

In addition to increasing certainty, swiftness, and severity of sanctions associated with gun violence, focused deterrence strategies seek to prevent violent gun injuries through the advertising of the law enforcement strategy and the personalized nature of its application. Gang-involved youth must understand the new antiviolence regimes being imposed. The effective operation of general deterrence is dependent on the communication of punishment threats to relevant audiences. As Zimring & Hawkins (71) observe, “the deterrence threat may best be viewed as a

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form of advertising” (p. 142). One noteworthy example of this principle is an evaluation of the 1975 Massachusetts Bartley-Fox amendment, which introduced a mandatory minimum one-year prison sentence for the illegal carrying of firearms. The high degree of publicity attendant on the amendment’s passage, some of which was inaccurate, increased citizen compliance with existing legal stipulations surrounding firearm acquisition and possession, some of which were not in fact addressed by the amendment (2). Zimring & Hawkins (71) further observe, “if the first task of the threatening agency is the communication of information, its second task is persuasion” (p. 149).

The available research suggests that deterrent effects are ultimately determined by offender perceptions of sanction risk and certainty (50). Durlauf & Nagin (20) observe that “strategies that result in large and visible shifts in apprehension risk are most likely to have deterrent effects that are large enough not only to reduce crime but also apprehensions,” and the authors identified focused deterrence strategies as having these characteristics (p. 40). As described above, focused deterrence strategies target very specific behaviors by a relatively small number of chronic offenders who are highly vulnerable to criminal justice sanctions. The approach directly confronts gang youth and informs them that continued gun offending will not be tolerated and how the system will respond to violations of these new behavior standards. In-person meetings with gang youth are an important first step in altering their perceptions about sanction risk (26, 50). As McGarrell et al. (44) suggest, direct communications and affirmative follow-up responses are the types of new information that may cause gang members to reassess the risks of committing violent gun injuries.

Spillover Deterrent Effects

Focused deterrence strategies intended to reduce citywide levels of gang violence are explicitly designed to deter continued gun violence by gangs not directly subjected to the treatment. Kennedy et al. (39) describe how the Boston Ceasefire working group went to considerable effort to design an intervention that would create “spillover effects” on other gangs and neighborhoods via their communication strategy. Enforcement actions, such as the arrest and prosecution of 23 members of the highly violent Intervale Posse gang, served as credible examples of the increased risks of engaging in gun violence in subsequent communication to other Boston gangs (37). Similarly, McGarrell et al. (44) reported that the Indianapolis Violence Reduction Partnership working group exploited the arrest and prosecution of 16 key members of the notorious Brightwood gang to accomplish its objective of communicating a zero tolerance for violence message to other gang members in the city. In essence, these strategies attempt to establish a deterrence regime by diffusing among a very particular audience knowledge of enhanced sanction risks associated with specific violent gun behaviors.

Although numerous studies previously noted its existence, the phenomenon of “spillover benefits” or effects was first introduced by Clarke (16). In reviewing several studies of opportunity-reducing measures, Clarke reported on sizeable reductions in crimes in areas that did not receive the intervention. Later, Clarke & Weisburd (17) offered a theoretical and descriptive elaboration on the broader concept known as “diffusion of benefits.” Defined as the “unexpected reduction of crimes not directly targeted by the preventive action,” and covering a wide range of possible forms (i.e., spatial, temporal, crime type, method, and target) (17, p. 165), diffusion of benefits can be thought of as the complete opposite of displacement (57).

Clarke & Weisburd (17) proposed that two processes or mechanisms underlie diffusion: deterrence and discouragement. Using diffusion by deterrence, the potential offender is influenced by an exaggerated assessment of risk (of detection or apprehension). For example, potential offenders may overestimate the “deterrent reach” of interventions and come to believe that they are “under



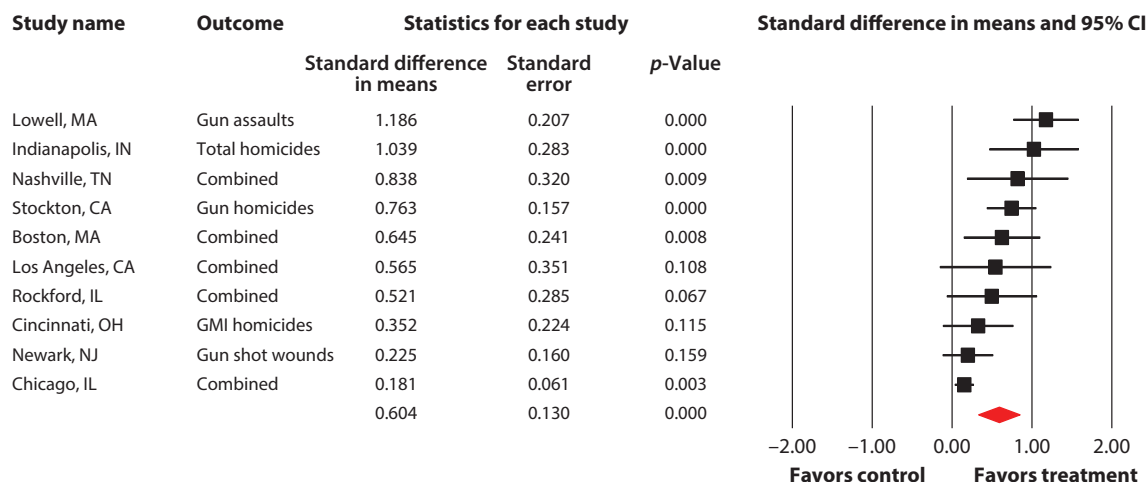


Figure 1

Mean effect sizes for area outcomes in eligible focused deterrence evaluations. Abbreviation: GMI, group member involved. Source: Reference 14, p. 48.

a greater threat of apprehension than is, in fact, the case” (17, p. 171). Using diffusion by discouragement, the potential offender is influenced by a miscalculated assessment of the effort needed to commit the crime, the reward associated with the successful completion of the crime, or both. In a systematic review of 120 situational crime prevention programs that considered displacement and diffusion effects, Guerette & Bowers (25) found that the occurrence of displacement is more the “exception rather than the rule,” and diffusion is somewhat more likely to take place than displacement (p. 1357). Similar results have been found regarding displacement in hot spots policing interventions, although diffusion of benefits effects have been even stronger (11, 67).

It is important to make a conceptual distinction between general deterrence, which is targeted (somewhat vaguely) at the public at large, and focused deterrence, which exploits criminal networks and is targeted at the acquaintances of punished offenders who are also likely to be criminally active (19, pp. 224–26). As shown in the lower half of **Figure 1**, both are forms of general deterrence that suppress crime through the vicarious experience of punishment rather than through personal punishment experiences. By explicitly targeting other members of the offending gang (i.e., associates) or individuals affiliated with other gangs (i.e., allies, rivals), focused deterrence interventions use the gang forum and word of mouth to project a tangible threat of punishment. The result is a type of general deterrence that is more highly circumscribed than it is usually conceived.

Other Theoretical Perspectives

Many scholars suggest that other complementary violence reduction mechanisms are at work in the focused deterrence strategies described here, which need to be highlighted and better understood (4, 14). Durlauf & Nagin’s (20) article focuses on the possibilities for increasing perceived risk and deterrence by increasing police presence. However, in the focused deterrence approach, the emphasis is on not only increasing the risk of offending, but also decreasing opportunity structures for violence, deflecting offenders away from violence, increasing the collective efficacy of communities, and increasing the legitimacy of police actions. Indeed, program designers and

implementers sought to generate large violent gun injury impacts from the multifaceted ways in which this approach influences gang-involved youth (31, 35).

Discouragement, as described above, emphasizes reducing the opportunities for crime and increasing alternative opportunity structures for offenders. In this context, situational crime prevention techniques are often implemented as part of the core pulling levers work in focused deterrence strategies (7, 59). Extending guardianship, assisting natural surveillance, strengthening formal surveillance, reducing the anonymity of offenders, and utilizing place managers can greatly enhance the range and the quality of the various enforcement and regulatory levers that can be pulled on offending groups and key actors in criminal networks. The focused deterrence approach also seeks to redirect offenders away from violent crime by providing social services and opportunities. Gang members were offered job training, employment, substance abuse treatment, housing assistance, and various other services and opportunities.

Finally, the focused deterrence approach takes advantage of recent theorizing regarding procedural justice and legitimacy. The effectiveness of policing is dependent on public perceptions of the legitimacy of police actions (58, 61, 62). Legitimacy is the public belief that there is a responsibility and an obligation to voluntarily accept and defer to the decisions made by authorities (61, 62). Recent studies suggest that when procedural justice approaches are used by the police, citizens will not only evaluate the legitimacy of the police more highly, but also be more likely to obey the law in the future (55). Advocates of focused deterrence strategies argue that targeted offenders should be treated with respect and dignity (34, 35), reflecting procedural justice principles. The Chicago PSN strategy, for instance, sought to increase the likelihood that the offenders would buy in and voluntarily comply with the prosocial, antiviolence norms that are advocated by communicating with offenders in ways that enhance procedural justice in their communication sessions (53).

SCIENTIFIC EVIDENCE ON GUN VIOLENCE REDUCTION IMPACTS

The available scientific evidence on the violence reduction value of focused deterrence strategies had been previously characterized as “promising” but “descriptive rather than evaluative” (58, p. 241) and as “limited” but “still evolving” (68, p. 10) by the US National Research Council’s Committee to Review Research on Police Policy and Practices and by the Committee to Improve Research Information and Data on Firearms, respectively. A recently completed Campbell Collaboration systematic review identified ten focused deterrence evaluations (14); eight of these evaluations were completed after the National Research Council reports were published. It is important to note here that none of the eligible studies used randomized controlled experimental designs to analyze the impact of focused deterrence on crime; rather, all ten eligible studies used quasi-experimental designs (14). Nevertheless, a better-developed base of scientific evidence thus existed to assess whether violence prevention impacts are associated with this approach.

Nine of the ten evaluations of pulling levers focused deterrence strategies concluded that these programs generated significant crime control benefits (14). Although the authors did report a small but positive reduction in gunshot wound incidents, only the evaluation of Newark’s Operation Ceasefire did not report any discernible crime prevention benefits generated by the violence reduction strategy. Evaluations of focused deterrence strategies targeting gangs and criminally active groups reported large statistically significant reductions in violent crime. These results reported the following: a 63% reduction in youth homicides in Boston (9), a 44% reduction in gun assault incidents in Lowell (12), a 42% reduction in gun homicides in Stockton (3), a 35% reduction in homicides of criminally active group members in Cincinnati (21), a 34% reduction in total homicides in Indianapolis (44), and noteworthy short-term reductions in violent crime in Los Angeles (60).



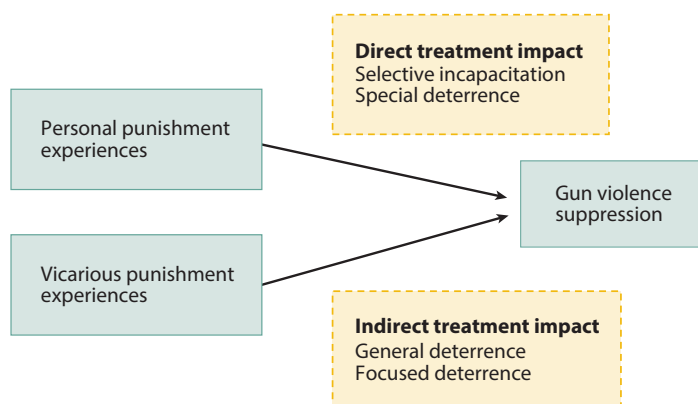


Figure 2

Conceptual model of the impact of focused deterrence strategies on gun violence. Source: Reference 5, p. 324.

Following Campbell Collaboration protocols, Braga & Weisburd (14) used meta-analyses of program effects to determine the size and direction of the effects and to weight effect sizes based on the variance of the effect size and the study sample size (9, 43). The forest plots in **Figure 2** show the standardized difference in means between the treatment and control or comparison conditions (effect size) with a 95% confidence interval plotted around them for all eligible studies. Points plotted to the right of 0 indicate a treatment effect; in this case, the study showed a reduction in crime or disorder. Points to the left of 0 indicate an effect where control conditions improved relative to treatment conditions. The meta-analysis of effect sizes suggests a strongly significant effect in favor of pulling levers focused deterrence strategies. The overall effect size for these studies is 0.604. This calculation is above Cohen's standard for a medium effect of 0.50 and below that of a large effect at 0.80 (18). Although there is evidence that quasi-experimental studies in crime and justice may exaggerate program outcomes (66, 70), the overall effect size is still relatively large compared with assessments of interventions in crime and justice work more generally.

In their Campbell review, Braga & Weisburd (14) noted that the only focused deterrence intervention to investigate the existence of spillover effects on gang violence was the Los Angeles evaluation carried out by Tita et al. (60). The intervention targeted two rival gangs operating out of the same area (Hollenbeck). Criminal activity (i.e., violent, gang, and gun crimes) was substantially reduced among the two gangs over a six-month prepost period. Slightly larger reductions in these crimes were evident among four nontargeted, rival gangs in surrounding areas during the same time period. Part of the explanation for the diffusion effects may rest with fewer feuds between the targeted and nontargeted gangs. The authors also speculated that diffusion effects may have been influenced by social ties among the targeted and rival gangs. This result seemed to be especially the case for gang crimes involving guns.

More recently, a rigorous quasi-experimental evaluation examined the main and spillover gun violence reduction impacts of a reconstituted Boston Ceasefire program implemented during the mid-2000s (5, 6). Similar to the 1990s programs, the post-2007 version of Boston Ceasefire attempted to create spillover deterrent effects onto other gangs that were socially connected to targeted gangs through rivalries and alliances. As Ceasefire interventions were completed on targeted gangs, the working group directly communicated to their rivals and allies that they would be next if these groups decided to retaliate against treated rival gangs or continue shootings in support of treated allied gangs. These messages were delivered to members of socially connected gangs

via individual meetings with gang members under probation supervision and through direct street conversations with gang members by Boston Police officers, probation officers, and gang outreach workers. Although these socially connected gangs were not directly subjected to the full Ceasefire treatment, the focused deterrence strategy was designed to reduce their gun violence behaviors via knowledge of what happened to their rivals and allies. As such, these socially connected gangs can be described as vicariously experiencing Ceasefire treatment.

The main effects evaluation reported that total shootings involving directly treated Ceasefire gangs were reduced by a statistically significant 31% relative to total shootings involving matched untreated comparison gangs (6). The spillover effects evaluation reported that total shootings involving vicariously treated Ceasefire gangs were reduced by a statistically significant 24% relative to total shootings involving comparison gangs (5). In some respects, the result showing an indirect or spillover effect of the Ceasefire intervention on gun violence represents a more complete test of deterrence theory than does the result showing a direct effect because, as emphasized in **Figure 1**, the direct impact of Ceasefire is actually composed of two distinct effects: selective incapacitation and special deterrence. Interventions that target violent gang members for prosecution and incarceration can achieve gang-level gun violence reductions simply by taking the most dangerous and prolific offenders from the targeted gang out of circulation. They can also achieve gun violence reductions by motivating punished offenders to cease offending or, more likely, to resort to nonviolent crimes that draw less attention from law enforcement. However, these two effects are hopelessly confounded, and it appears impossible for any empirical test to untangle them.

From the standpoint of gun violence suppression, of course, the distinction between selective incapacitation and special deterrence is irrelevant; that is, it matters only whether an intervention works by increasing public safety (47). From the standpoint of theory, on the other hand, the distinction is of paramount importance. Ceasefire is, after all, touted as a focused deterrence intervention as opposed to a selective incapacitation intervention. Consequently, because of the empirical ambiguity outlined above, any test of the deterrence efficacy of Ceasefire must, by definition, be evaluated from the spillover effects of the program.

SUMMARY AND CONCLUSION

The ultimate target of focused deterrence gun violence reduction strategies is the self-sustaining dynamic of retaliation that characterizes many ongoing gang conflicts (34, 39). Focused deterrence operations are designed not to eliminate gangs or stop every aspect of gang activity, but to control and deter gang-involved gun violence. The communication of the antiviolence message, coupled with meaningful examples of the consequences that will be brought to bear on gangs that break the rules, sought to weaken or eliminate the “kill or be killed” norm as individuals recognize that their enemies will be operating under the new rules as well. The social service component of focused deterrence strategies serves as an independent good and also helps to remove excuses used by offenders to explain their offending. Social service providers present an alternative to illegal behavior by offering relevant jobs and social services. The availability of these services invalidates excuses that offenders’ violent behaviors are the result of a lack of legitimate opportunities for employment, or other problems, in their neighborhood.

Focused deterrence strategies are a recent addition to the existing scholarly literature on violent gun injury control and prevention strategies. The available scientific evidence suggests that these new approaches to violence prevention and control generate gun violence reductions. The positive outcomes of the existing body of evaluations indicate that additional randomized experimental evaluations, however difficult and costly, are warranted. Although the evaluation evidence needs to be strengthened and the theoretical underpinnings of the approach need refinement, jurisdictions



suffering from serious gun violence problems should add focused deterrence strategies to their existing portfolio of prevention and control interventions.

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